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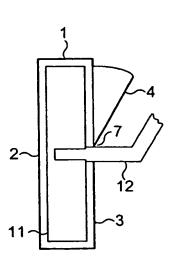
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DETACHABLE WHEEL COVER



(57) Abstract: A detachable wheel cover for a trolley, pushchair or the like comprises a substantially cylindrical part (1) which is adapted to fit around the periphery of a wheel (11), a first side (2) adapted to cover one side of the wheel (11) and a second side (3) adapted to cover the other side of the wheel (11). The edges of the sides (2,3) are secured to the edges of the substantially cylindrical part (1) by stitching and/or adhesive. An opening which is closable by a flap (4) is provided in the side (2) so that the wheel (11) can be inserted into the cover. Once the wheel has been inserted, the flap (4) can be folded to close the opening and the flap can be held in position by releasable fastening means such as "Velcro" (Registered Trade Mark). An axle (12) on which the wheel (11) is mounted extends through a small central aperture (8) in a central region of the side (3) of the cover.



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Title: DETACHABLE WHEEL COVER

This invention relates to covers for the wheels of trolleys such as golf trolleys or for the wheels of pushchairs and the like.

A problem frequently encountered by golfers is that having played a round of golf, the wheels of the trolley carrying the golfer's clubs have become dirty. The golfer must therefore either clean the wheels or provide a mat or the like to prevent the boot of the vehicle in which the trolley is to be carried from becoming soiled. In either case, the trolley can move while the vehicle, in which the trolley is being carried, is being driven and dirt can shake loose from the wheels of the trolley and soil the vehicle.

The same problem arises with foldable pushchairs and the present invention seeks to provide a solution to the problem.

According to the invention, there is provided a cover for a wheel of a trolley, pushchair or the like, which cover comprises a substantially cylindrical part which is adapted to fit around the periphery of a wheel for which the cover is intended, a first side adapted to cover one side of the wheel and a second side adapted to cover the other side of the wheel, the substantially cylindrical part being joined to or formed integrally with the first and second sides of the cover and a closable opening being provided whereby a wheel can be inserted into the cover through the opening and said opening then being closed by releasable fastening means; wherein the opening is provided in one of the sides of the cover.

According to a preferred embodiment of the invention, the opening is provided in a side of the cover which is intended, in use, to cover the side of the wheel from which an axle on which the wheel is mounted extends. Desirably, the

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opening can be closed by a flap which extends over an arc of the side of the cover and which can be releasably fastened to the substantially cylindrical part or to the side of the cover. In this manner, the flap can be released from the cover, the cover can be fitted around the wheel and the flap then fastened to the cover to enclose the wheel. The axle on which the wheel is mounted extends through a small part of the opening in a central region of the side of the cover.

The releasable fastening means may take any suitable form such as press studs, a sliding clasp fastener or co-operating engageable strips such as those sold under the Registered Trade Mark "Velcro".

The invention will now be described in detail, by way of example, with reference to the drawings in which:-

Fig. 1 is a side elevation of one embodiment of a wheel cover according to the invention;

Fig. 2 is a section taken on the line II - II in Fig. 1 in the direction of the arrows, but showing the cover fitted to a wheel; and

Fig. 3 is a side elevation of another embodiment of a wheel cover according to the invention.

In the drawings, like parts are denoted by like reference numerals.

Reference will first be made to Figs. 1 and 2 of the drawings in which a wheel cover according to the invention comprises a substantially cylindrical part 1 which is adapted to fit around the periphery of a wheel 11 as shown in Fig. 2. A first side panel 2 is secured, for example by means of stitching and/or an adhesive to one edge of the part 1. A second side panel 3 is secured, again for example by means of stitching and/or an adhesive, to the opposite edge of the part 1. The side panel 3 has a sector region extending over about 45° and formed in the shape of a flap 4 which is hinged to the remainder of the side panel 3. The flap 4 can be held

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in position by means of, for example, a "Velcro" (Registered Trade Mark) fastener, one strip 5 of which is secured to the side panel 3 adjacent to the opening accommodating the flap 4 and the other strip 6 of which is secured to a side edge of the flap remote from the hinged edge 7.

In use, the flap 4 is folded down about the hinge 7, after the strips 5 and 6 of the fastener have been separated from one another, and the wheel cover is fitted over the wheel 11 of a golf trolley or the like as shown in Fig. 2 of the drawings. The side panel 3 has a central aperture 8 to accommodate an axle 12 on which the wheel 11 is mounted. Once the wheel cover has been fitted onto the wheel, the flap 4 can be pivoted about the hinge 7 to close the opening and the flap can be held in place by the strips 5 and 6 of the fastener.

The wheel cover can be removed from the wheel 11, simply by separating the strips 5 and 6 of the fastener, folding down the flap 4 and stripping the cover off the wheel.

The embodiment shown in Fig. 3 differs from the embodiment shown in Figs. 1 and 2 in that a second flap 9 is provided which is hinged at 10 to the side panel 3. In this case, one strip 5 of the "Velcro" (Registered Trade Mark) fastener is secured to the flap 4 while the other strip 6 is secured to the other flap 9. The wheel cover can be fitted to a wheel in a similar manner to the cover shown in Figs. 1 and 2 except that, in this case, both flaps 4 and 9 are folded back while the cover is fitted over a wheel and the flaps are then folded back and held in place by the enter-engaging strips 5 and 6 of the fastener.

The side panel 2 can be covered by advertising or promotional material.

The covers can be made of any suitable material but a flexible and waterproof material is preferred such as a suitable synthetic plastics material.

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The invention is not restricted to the above described embodiment but variations and modifications may be made without departing from the scope of the invention. For example, the substantially cylindrical part 1 need not be secured to the side panels 2 and 3 but could be formed integrally with at least one of the side panels.

It will be seen that the wheel cover according to the invention can readily be fitted to a wheel of a golf trolley before the trolley is put into a vehicle and will thus prevent the vehicle from becoming soiled by the wheel. Of course, a separate wheel cover should be fitted to each of the wheels of the trolley. Further, the invention is not restricted to wheel covers for golf trolleys. The wheel covers can be used for the wheels of other articles such as pushchairs.

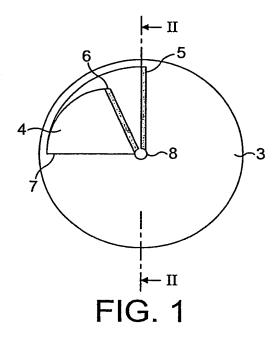
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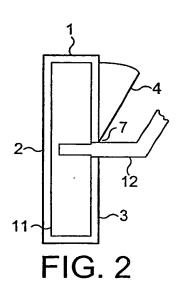
CLAIMS

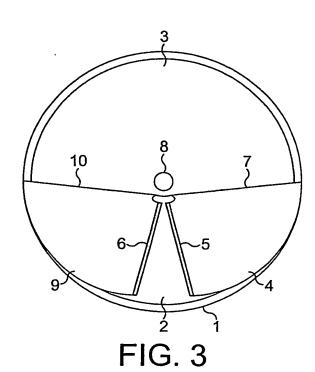
- 1. A cover for a wheel of a trolley, pushchair or the like, said cover comprising a substantially cylindrical part which is adapted to fit around the periphery of a wheel for which the cover is intended, a first side adapted to cover one side of the wheel and a second side adapted to cover the other side of the wheel, the substantially cylindrical part being joined to or formed integrally with the first and second sides of the cover and a closable opening being provided whereby a wheel can be inserted into the cover through the opening and said opening then being closed by releasable fastening means, wherein the opening is provided in one of the sides of the cover.
- 2. A wheel cover according to claim 1, wherein the opening is provided in a side of the cover which is intended, in use, to cover the side of a wheel from which an axle on which the wheel is mounted extends.
- 3. A wheel cover according to claim 2, wherein the opening is closable by a flap which extends over an arc of the said side of the cover in which the opening is provided and which is adapted to be releasably fastened to said side and/or the substantially cylindrical part of the cover to close said opening.
 - 4. A wheel cover according to claim 3, wherein the arc is approximately 45°.
- 20 5. A wheel cover according to claim 3, wherein the arc is approximately 90°.
 - 6. A wheel cover according to any one of claims 3 to 5, wherein a second flap is provided, each flap extending over approximately one half of the arc of said opening and the flaps being provided with releasable fastening means whereby they can be releasably secured together to close the opening.

- 7. A wheel cover according to any one of claims 2 to 6, wherein a small part of the opening in a central region of the side of the cover is arranged to remain open, in the closed position of the cover, to accommodate the axle on which the wheel is mounted when the wheel cover is in use.
- 8. A wheel cover according to any one of the preceding claims, wherein advertising or promotional material is applied to the other side of the cover.
 - 9. A wheel cover according to any one of the preceding claims, wherein the releasable fastening means comprise press studs and/or at least one sliding clasp fastener and/or at least one pair of co-operating engageable strips.
- 10. A wheel cover according to any one of the preceding claims, wherein the cover is made of a flexible and waterproof material and/or a synthetic plastics material.

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INTERNATIONAL SEARCHYRERORT 0 8 MAR 2009

Application No. 27304

A. CLASSIFICATION OF SUBJECT MATTER
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A63C17/22

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) $IPC \ 7 \quad B60B \quad B62B \quad A63C$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUM	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 1 508 419 A (GIDEON SUNDBACK) 16 September 1924 (1924-09-16) page 1, line 82 - page 2, line 55; figures	1-3,5,6, 9
A	US 4 932 573 A (FLINT RONALD T) 12 June 1990 (1990-06-12) column 2, line 12 - column 3, line 17; figures	1-10
A,P	US 6 499 591 B1 (RIZZO DOROTHEA ET AL) 31 December 2002 (2002-12-31) column 3, line 41 - column 4, line 14; figures	1,8
А	GB 2 346 848 A (DUGMORE BARRY; JOBLING MARK (GB)) 23 August 2000 (2000-08-23) page 2, line 15 - page 3, line 4; figures -/	1,8

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Further documents are listed in the continuation of box C.	χ Patent family members are listed in annex.
Special categories of cited documents: 'A' document defining the general state of the art which is not considered to be of particular relevance 'E' earlier document but published on or after the international filing date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'O' document referring to an oral disclosure, use, exhibition or other means 'P' document published prior to the international filing date but later than the priority date claimed	 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
5 November 2003	14/11/2003
Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Fax: (+31-70) 340-3016	Vanneste, M .



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Category °	ation) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages	¥
	of the relevant passages	Relevant to claim No.
A	US 5 809 606 A (MACDONALD GRAHAM ANDREW ET AL) 22 September 1998 (1998-09-22) column 2, line 21 - line 57; figures	1
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INTERNATIONA EARCH REPORT

Intern	Application No
PCT/GB	03/03400

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 1508419	Α	16-09-1924	NONE		
US 4932573	Α	12-06-1990	NONE		
US 6499591	B1	31-12-2002	NONE		
GB 2346848	Α	23-08-2000	NONE		
US 5809606	A	22-09-1998	GB AU AU CA WO	2282578 A 685597 B2 1819095 A 2199026 A1 9607553 A1	12-04-1995 22-01-1998 27-03-1996 14-03-1996 14-03-1996

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